WE CLAIM

1. A stent, comprising:

a distal section and a proximal section, said distal and proximal sections having different diameters and comprising a helical structure having a plurality of coils, said structure having a longitudinal axis and said coils having a pitch, said structure having an internal longitudinal passage, wherein said structure is made from a fiber having a cross-section, said fiber comprising:

an inner core having an exterior surface comprising a biodegradable polymer formed from monomers selected from the group consisting of lactide, glycolide, para-dioxanone, trimethylene carbonate, caprolactone, and combinations thereof, said polymer having a first degradation rate;

an outer section covering the exterior surface of the inner core, the outer section comprising a blend of a first biodegradable polymer component and a second biodegradable polymer component, said first polymer component comprising a first biodegradable polymer, wherein said first biodegradable polymer comprises a lactide/glycolide copolymer having at least about 80 mole percent of polymerized

glycolide, said second polymer component comprising a second biodegradable polymer, wherein said second polymer comprises a lactide-rich copolymer comprising at least about 50 mole percent of polymerized lactide, said outer layer having a second degradation rate, wherein the blend comprises at least about 50 weight percent of the first component and at least about 5 weight percent of the second component,

wherein said second degradation rate of said outer section is lower than said first degradation rate.

2. The stent of claim 1, wherein the core and the outer layer of the fiber are coextruded.

3. The stent of claim 1, wherein the polymer for the inner core comprises a polymer having a sequence selected from the group consisting of random, block, and segmented block sequences and combinations thereof.

4. The stent of claim 1 wherein the polymer for the inner core comprise a copolymer of about 75 mole percent polymerized glycolide and about 25 mole percent polymerized caprolactone.

5. The stent of claim 1, wherein the blend of the outer section comprises at least about 50 weight percent of the first component and at least 20 weight percent of the second component, wherein the blend comprises about 38 to about 89 weight percent of polymerized glycolide with the remainder comprising copolymerized lactide.

6. The stent of claim 1, wherein the first component of the blend of the outer section comprises a 10/90 lactide/glycolide copolymer, and the second component comprises an 85/15 lactide/glycolide copolymer, wherein the blend comprises about 60 weight percent of the first component and about 40 weight percent of the second component, wherein the blend comprises about 60 weight percent of polymerized glycolide and about 40 weight percent of polymerized lactide.

7. The stent of claim 1 wherein the fiber comprises a substantially oval cross-section.

8. The stent of claim 1, wherein the fiber additionally comprises a longitudinal, hollow passage.

9. The stent of claim 1, wherein the inner core degrades into small particles.

10. The stent of claim 1, wherein the outer section degrades into a fibrillar morphology.

11. The stent of claim 1, wherein the fiber has a substantially circular cross-section.

12. The stent of claim 1, wherein the helical structure is made from more than one fiber.

13. The stent of claim 1, wherein the inner core additionally comprises a pharmaceutical agent.

14. The stent of claim 1 wherein the outer section additionally comprises a pharmaceutical agent.

15. The stent of claim 1, additionally comprising a radio-opaque compound.

16. The stent of claim 1 wherein the outer section is a coating.

17. The stent of claim 1 wherein the outer section is a layer.

18. The stent of claim 1 wherein the first biodegradable polymer further comprise a therapeutic agent.

19. The stent of claim 1 wherein the second biodegradable polymer further comprise a therapeutic agent.

20. The stent of claim 1 wherein the diameter of said proximal section is less than the diameter of said distal section.

21. The stent of claim 20 wherein said proximal section has a diameter of from about 4 mm to about 12 mm and said distal section has a diameter of from about 6 mm to about 25 mm.

22. The stent of claim 20 wherein said proximal section has a diameter of about 8 mm and said distal section has a diameter of about 18 mm.